

SOLICITOR #39
MAY 25 2004

U.S. PATENT & TRADEMARK OFFICE

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

04-1074
(Serial No. 09/136,483)

IN RE SUJEET KUMAR, HARIKLIA DRIS REITZ,
XIANGXIN BI, and NOBUYUKI KAMBE

Appeal from the United States Patent and Trademark Office,
Board of Patent Appeals and Interferences.

REPLY BRIEF OF APPELLANTS
SUJEET KUMAR, HARIKLIA DRIS REITZ,
XIANGXIN BI and
NOBUYUKI KAMBE

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[Handwritten signature]

CERTIFICATE OF INTEREST

Counsel for the Appellants, Sujeet Kumar, Hariklia Dris Reitz, Xiangxin Bi and Nobuyuki Kambe, certifies the following:

1. The full name of every party represented by me is:

Sujeet Kumar,
Hariklia Dris Reitz,
Xiangxin Bi, and
Nobuyuki Kambe.

2. The name of the real party in interest represented by us is:

NanoGram Corporation, a Deleware corporation with corporate offices at 2911 Zanker Road, San Jose, CA 95134.

3. NanoGram Corporation is a privately held corporation.

4. The names of all law firms and the partners or associates that appeared for the party now represented by me in the trial court or agency or are expected to appear in this court are:

Patterson, Thuente, Skaar & Christensen, P.A.
Peter S. Dardi
Tye Biasco

May 19, 2004

By: 
Tye Biasco

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STATEMENT OF RELATED CASES

Pursuant to Federal Circuit Rule 47.5, Appellants, Sujeet Kumar, Hariklia Dris Reitz, Xiangxin Bi, and Nobuyuki Kambe note that continuation-in-part patent application 09/433,202 claims priority to the present application and is on appeal before the U.S. Patent Office Board of Patent Appeals. There are no related cases under the jurisdiction of the Federal Courts.

ABBREVIATIONS AND RECORD REFERENCES

Appellants Sujeet Kumar, Hariklia Dris Reitz, Xiangxin Bi, and Nobuyuki Kambe are referred to as "Appellants," the United States Patent and Trademark Office is referred to as "PTO," and the Board of Patent Appeals and Interferences is referred to as "the Board." U.S. Patent Application No. 09/136,483 is referred to as "the '483 Application."

U.S. Patent No. 5,389,194 is referred to as the Rostoker patent and U.S. Patent 5,128,081 is referred to as the Siegel patent.

Citations to pages in the Appendix are preceded by the letter A (e.g., A0010). Where available, particular lines or paragraphs of the cited page are provided parenthetically. Citations to the Appendix may also be followed by a description of the document cited.

SUMMARY OF THE ARGUMENT

The Solicitor has not provided clarity to the confusion surrounding the disclosure of the Rostoker patent. Furthermore, the Board has not provided adequate justification for the Board's refusal to consider Professor's Singh's Declaration on this issue. In addition, Applicants have provided clear and convincing evidence that the Rostoker patent does not teach a person of ordinary skill in the art to practice Appellants' claimed invention.

ARGUMENT

I. The Solicitor Has Misstated The "Facts."

Appellants find it surprising, at least, that the Solicitor has decided to put a significant aspect of his analysis in the "Statement of Facts." Rather than putting facts in the Statement of Facts, the Solicitor has decided to introduce a particular perspective on the interpretation issues under the guise of "Facts."

Appellants are loath to enter deeper into the quagmire of the Rostoker gobbledegook. On page 8 of the Solicitor's Brief, the Solicitor attempts to give a new meaning to the Rostoker particle size distribution in terms of the language "controlled to within a preferred number of nanometers ('Y') of the preferred sizes ('X')."¹ The Solicitor's analysis leads to a distribution of 5-150 nm as the maximum. This is based on the range of averages "X". Then, on page 9, the

Solicitor provides a range for a particular distribution for an average particle size value of 10 nm.

But the language "controlled to within" does not have a meaning within the art to indicate that all particles of a collection of particles are within a certain size range. "Controlled to within" simply does not say what the Solicitor has indicated it says. Giving a convenient meaning to the words beyond their explicit language is not reasonable. Furthermore, this interpretation is not internally consistent with the remaining discussion in the Rostoker patent. The internal inconsistencies were discussed in detail in Appellants' main brief, and putting all the interpretation of the distribution into the phrase "controlled to within" does not remove these inconsistencies.

On page 10 of the Solicitor's brief, the Solicitor equates their interpretation on pages 8 and 9 with the ambiguous language of the prophetic examples. The ambiguity of the language in the prophetic examples was discussed in Appellants' main Brief, and an alternative definition of the meaning is certainly not a fact. Similarly, the explanation of Q on pages 11 and 12 of the Solicitor's Brief is not internally consistent within the Rostoker patent and is certain not a "Fact." The ambiguity of Q is discussed in detail in Appellants' main brief.

II. The Solicitor Has Misstated the Board's Decision.

On pages 16-17 of the Solicitor's Brief, the Solicitor states "Even though the Singh declaration was untimely filed, the Board did review it and addressed its contents. The Board found that the Singh declaration did not rebut the particle sizes and distributions taught by Rostoker; ..." Appellants simply cannot find such review in the Board's response to the request for rehearing. A766. The Solicitor's summary of the Board's decision is not correct on this point. The Board did not consider at all Professor Singh's Declaration, and they should have for the reasons stated in Appellants' main brief. This misstatement on the "review" of the Singh Declaration is repeated on page 38 of the Solicitor's brief.

III. The Solicitor Does Not Adequately Rebut Arguments Against the Consideration of Professor Singh's Declaration.

Appellants presented three arguments to support the asserted legal error that the Board should have considered Professor Singh's Declaration. With respect to Appellants' argument that the Board's refusal to consider Dr. Singh's Declaration was contrary to the Administrative Procedures Act, 5 U.S.C. § 554, the Solicitor merely states at page 40 that the argument is without merit. However, the Patent Office has successfully argued that Patent Office Proceedings are bound by the Administrative Procedures Act. *See Dickinson v. Zurko*, 527 U.S. 150 (1999). The Solicitor has not presented any arguments to counter Appellants' statutory construction.

With respect to Appellants' argument that the denial for a request for rehearing based on Professor Singh's Declaration was an abuse of discretion, the Solicitor seems to be arguing that the request for rehearing "would frustrate review of the Board's decision on the record by this court." With all due respect, Appellants' cannot understand how the granting of a Request for Rehearing would frustrate review on the record.

With respect to Appellants' argument that there was a good reason for the submission of Professor Singh's Declaration after the Board's decision, the Solicitor argued that the Board's presentation in the Appendix of its decision was not evidence. By this same argument, Professor's Singh's Declaration is not new evidence since it is just an analysis by an agent of Appellants with actual expertise in the field. If it is not new evidence, like the Board's new analysis and the Solicitor's new analysis, then the Declaration can be presented at any stage of the proceedings even for the first time in front of this court.

Regardless of how the Board's Decision on Appeal is characterized, the Board presented a new analysis in their decision and the corresponding appendix. Appellants should have had the opportunity to respond. The Solicitor argued that Professor Singh's Declaration had originally been submitted in a different case of the assignees on December 10, 2001. But this present Appeal was fully briefed before the Board on December 28, 2000, almost a full year prior to

the filing of the Singh declaration in the case referred to by the Solicitor. This emphasizes the great delay that would result from the Board's refusal to consider the Declaration in response to the Board's analysis. Appellants believed at the time of briefing this case before the Board that they had adequately rebutted the Examiner's arguments. Applicants note again for the record that Final Rejection had 20 grounds of rejection of the present claims on Appeal. Since only two of these rejections were maintained in the Examiner's Answer on Appeal, Appellants clearly adequately rebutted 18 of these grounds of rejection. And Appellants felt confident that they had also adequately rebutted the remaining two grounds of rejection. For these reasons, the date on Professor Singh's declaration is not particularly relevant.

IV. The Solicitor Cannot Analyze Bits And Pieces Of Disclosure In A Struggle To Give Meaning To Rostoker.

It is not reasonable to rewrite the disclosure of a reference to give meaning to the meaningless. It is similarly unreasonable to examine a portion of a reference out of context. A reference should be viewed as a whole, and not piecemeal, for interpretation.

The PTO's interpretation on pages 20-29 of the Solicitor's Brief is based on rewriting a vague description in the prophetic examples or on reading parts of the more detailed description of the Rostoker particle size distribution out of context of the remaining portions. The Solicitor provides a piecemeal analysis

because the different pieces are internally inconsistent. But the portions viewed out of context are incomplete and also inconclusive on their own. There is no self-consistent complete view that makes sense. This is consistent with Professor Singh's position. Professor Singh is an expert in the field. It is hard to understand how a person of ordinary skill in the art could make sense of this description when an expert could not. The Patent Office is giving meaning to the words that do not flow from the words themselves.

V. The Rostoker Patent Simply Does Not Place Applicants' Claimed Invention In The Hands Of The Public.

This Court's predecessor has stated that "If a reference was found adequate, as in the case of the Doran reference in *In re Samour* which discloses a compound within the scope of the claims and cited an independent reference which discloses the compound and that the same had been tested, this Court concluded that the compound was adequately described and in possession of the public in view of the disclosure in the other prior art that would have been obvious to prepare the compound." *In re Donohue*, 632 F.2d 123, 125 (CCPA 1980) (citations omitted). Under the present facts, the description of the Rostoker patent is inadequate and the independent Siegel reference is deficient.

At the Solicitor's Brief at page 30, the Solicitor misstates Applicants' position as just a "different way of arguing" the point about the particle size distribution. But in the next paragraph the Solicitor correctly states, inconsistent

with the earlier statement, "Kumar argues that Rostoker does not teach one skilled in the art to manufacture aluminum oxide nanoparticles having a narrow particle size distribution." It is true that since Appellants still do not know what Rostoker is claiming or describing, Appellants focused on their claimed invention in their evaluation of enablement. This does seem like the correct perspective since the issue is the patentability of Appellants' claims and not the claims of the Rostoker patent.

The Solicitor correctly states the law in section 2 from page 31 of his brief through the cross over paragraph on page 33. However, the full paragraph on page 33 is confusing. It is in dispute if Kumar's claims overlap with Rostoker's disclosure. Also, the Solicitor's statement presumes that the Rostoker patent is enabling over its entire claimed range, whatever that is. It is more to the point to evaluate whether or not the Rostoker patent teaches the practice of any of the claimed range of Appellants' claims.

The Solicitor's argument on enablement seems to be that the Rostoker patent taught the range so it is enabled by its description. This is simply not the law, as described in Appellants' brief. It is very well established that describing a composition of matter does not place the composition in the hands of the public without teaching a way of making the composition of matter. On page 34, the Solicitor argues that the Siegel patent describes Appellants' claimed powders.

Appellants' have presented unrefuted evidence that the process of the Siegel patent cannot make Appellants' claimed powders. *See* Amendment A, A380-A393 and attachments A390-A405: Siegel et al., Journal de Physique C5: Supplement 10, 681-686 (October 1988) and Quinton Ford Article from Nanphase.

Further, since these initial arguments were formulated, Appellants have come to understand that the "nanocrystals" described in the Siegel patent are not nanoparticles, but grains within somewhat larger particles. Thus, even the grains of the Siegel method are not as uniform as Appellants' claimed particles, and the Siegel particles are even less uniform and are larger than the nanocrystal sizes described.

In summary, Applicants' presented unrefuted objective evidence that the Siegel patent is unable to produce Appellants' claimed particles. With respect to the assertion that other approaches could be used, Dr. Kambe's Declaration directly addresses that point. Dr. Kambe is an internationally recognized expert in the art. The PTO has summarily dismissed Dr. Kambe's Declaration as being unsupported by evidentiary showing, without giving any indication of what evidence would be appropriate. Appellants have presented what they believed was the most convincing evidence available and cannot elucidate what other evidence to show since the Rostoker patent itself is no help in this regard.

Appellants have presented clear and convincing evidence that the Rostoker patent does not place Appellants' claimed particles in the hands of the public. Thus, the patent does not support either an anticipation rejection or an obviousness rejection.

CONCLUSION

For reasons stated above, it is respectfully submitted that the PTO failed to establish a *prima facie* case of obviousness because the Rostoker patent does not teach the subject matter of Appellants' claimed invention. To the extent that the PTO has established *prima facie* obviousness, Appellants assert that they have met their burden in rebutting the Examiner's *prima facie* case by presenting clear and convincing evidence that the Rostoker patent is not enabling with respect to Appellants' claimed invention. When viewing the evidence as a whole, the PTO clearly has not proven obviousness by a preponderance of the evidence. Appellants respectfully request the reversal of the rejection of claims 1-3, 5-16, and 19-22 and allowance of the claims.

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Respectfully submitted,

PATTERSON, THUENTE,
SKAAR & CHRISTENSEN, P.A

Dated: May 19, 2004

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CERTIFICATE OF SERVICE

Tye Biasco certifies that on the 19th day of May 2004, two copies of the Reply Brief for the above-captioned case were served upon the below-named as follows:

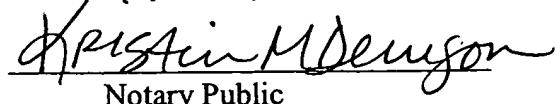
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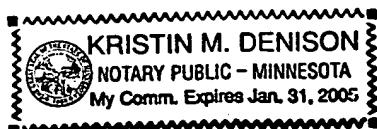
Tye Biasco

Subscribed and sworn to before me
this 19th day of May 2004.



Kristin M. Denison

Notary Public



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CERTIFICATE OF COMPLIANCE

Pursuant to Fed. R. App. P. 32(a)(7)(C) and Fed. Cir. R. 32(b), the attached Reply Brief of Appellants is printed using a proportionally spaced 14-point Times New Roman typeface and contains 2,056 words as counted by Microsoft Word.

Dated: May 19, 2004

By 
Peter S. Dardi, Ph.D.
Tye Biasco

Appendix B

List of Cited References - Attached

1. U.S. Patent 4,861,572 to Sugoh et al.
2. U.S. Patent 4,705,762 to Ota et al. /
3. U.S. Patent 5,635,154 to Arai et al. ✓
4. U.S. Patent 5,417,956 to Moser /
5. U.S. Patent 5,447,708 to Helble et al. /
6. U.S. Patent 5,804,513 to Sakatani et al. ✓
7. U.S. Patent 5,697,992 to Ueda et al. /
8. U.S. Patent 5,868,604 to Atsugi et al. /
9. U.S. Patent 4,021,263 to Rosenblum
10. U.S. Patent 5,228,886 to Zipperian /
11. U.S. Patent 5,300,130 to Rostoker
12. U.S. Patent 5,389,194 to Rostoker et al.
13. U.S. Patent 5,527,423 to Neville et al.
14. U.S. Patent 5,064,517 to Shimo /
15. Pending claims of 09/961,735